

## **Appendix A**

### **Environmental Regulations, Laws, and Treaties**

Environmental issues are a major concern for the Army and the Marine Corps, and with emerging new laws and regulations, environmental protection will continue to have a growing impact on Army and Marine Corps operations. Violations of federal, state, or local environmental laws can result in both civil and criminal penalties. Unit leaders must understand the laws and respond accordingly. They must understand and apply the respective Army or Marine Corps regulations, ensure that unit personnel are properly trained and that all legal and regulatory guidance and requirements (both military and civilian) are met.

This appendix provides a brief description of the primary Army and Marine Corps environmental regulations and the principal environmental laws applicable to military activities. Military facilities are subject to federal, state, local and HN environmental laws; when the requirements differ, the most stringent applies. Environmental laws affect almost every military operation. Services do not expect commanders to be legal experts, yet they must understand the requirements of environmental laws and regulations. The installation's environmental staff is the best source of assistance to ensure unit compliance with environmental laws and regulations. As discussed in Chapter 5 and in Appendix D, help is also available to the subordinate unit commander by the higher headquarters' staff, especially during an operation that takes the unit away from an installation. Ignorance of environmental laws is not an excuse for noncompliance, and it will not protect commanders, soldiers/Marines, or the military services from civil and criminal liability.

These short synopses of laws and regulations provide only a brief sketch and are not inclusive of all requirements.

### **SOURCES OF ENVIRONMENTAL LAWS AND REGULATIONS**

Federal, state, local, and host nation governments have established laws and regulations to protect human health and natural and cultural resources from environmental degradation. Heightened environmental awareness by the public and the federal government has led agencies to develop policies to support regulatory compliance and stewardship. The four primary sources of environmental law that influence Army and Marine Corps actions are federal, state, local, and host nation. The President also directs the federal government through the use of EOs and the DOD complies with those

directives as it does with any other federal law. DOD/Army/Marine Corps regulations, orders, and pamphlets, identified in this appendix, provide additional guidance for commanders. The Army and Marine Corps will comply with these laws and regulations as they pertain to individual localities or installations, deployments, or operations.

Full compliance with applicable environmental laws and regulations is a necessary cost of doing business. To that end, the Army and Marine Corps are committed to setting the standards for the DOD and other federal agencies as the leaders in compliance with environmental laws, prevention of environmental damage, and the protection and stewardship of natural resources. In doing so, the Army and Marine Corps are making a concerted effort to integrate environmental considerations into all Army and Marine Corps activities.

At most locations, installation environmental support personnel are available to help unit leaders understand the various laws and regulations. These support personnel include the chain of command and key installation personnel (DPW/environmental officer, SJA attorneys, range officers, and so forth). Installation support personnel are addressed in more detail in Chapter 5. Consult with installation environmental agencies on specific requirements for each location. Given the state and local differences on environmental laws, soldiers/Marines need to understand that what is environmentally permissible on one installation may not be permissible on another.

## **ARMY/MARINE CORPS REGULATIONS, ORDERS, AND PAMPHLETS**

### **AR 200-1**

AR 200-1 defines environmental program objectives and assigns management responsibilities. This regulation lists duties and responsibilities for each level of command from DA through the unit level. It also requires company, battery, or troop commanders in the Army, Army NG, and Army RC to appoint trained ECOs. AR 200-1 addresses the following major areas:

- Research and development.
- Water resources.
- Air pollution.
- HM/HW and solid waste.
- Noise.
- Environmental restoration.
- Asbestos.
- Radon reduction.

- Environmental training.

## **AR 200-2**

AR 200-2 implements NEPA within the Army. This regulation sets forth Army policies and responsibilities for the early integration of environmental considerations into Army planning and decision-making. The NEPA process described in this regulation applies to installations and units. This regulation establishes criteria for determining if Army actions are covered under categorical exclusion, or if an EA or EIS is required.

## **AR 200-3**

AR 200-3 addresses land management and maintenance. This regulation provides guidelines for installation staff members having land management responsibilities (DPW, game management, range control, and the environmental office). Land management regulation includes guidelines for the following:

- Soil.
- Vegetation.
- Fish.
- Wildlife.
- Endangered species.
- Forests.
- Timber production.
- Agricultural leasing.
- Other land use purposes that are in the Army's or public's interest.

## **AR 200-4**

AR 200-4 is the Army's policy for managing cultural resources to meet legal compliance requirements and support the military mission. It provides guidance for the treatment of cultural resources, including prehistoric sites, historic buildings and structures, traditional cultural properties, and Indian sacred sites on Army-controlled properties.

This regulation replaces AR 420-40 and has been revised to update the Army's policy for managing cultural resources to meet legal compliance requirements and to support the military mission. Cultural resources are: historic properties as defined in the National Historic Preservation Act (NHPA), cultural items as defined in the Native American Graves Protection and Repatriation Act (NAGPRA); archaeological resources as defined in the Archaeological Resources Protection Act (ARPA), sacred sites as defined in

EO 13007 to which access is provided under the American Indian Religious Freedom Act (AIRFA), and collections as defined in 36 Code of Federal Regulation (CFR) 79 Curation of Federally Owned and Administered Collections. Requirements set forth in NEPA, NHPA, ARPA, NAGPRA, AIRFA, 36 CFR 79, EO 13007, and Presidential Memorandum on Government to Government Relations with Native American Tribal Governments define the basis of the Army's compliance responsibilities for managing cultural resources. Regulations applicable to the Army's management of cultural resources include those promulgated by the Advisory Council on Historic Preservation (ACHP) and the National Park Service (NPS). It also requires that installations develop and integrate CRMP to outline procedures for integrating cultural resources management responsibilities and mission requirements.

**AR 350-4**

This regulation sets forth the objectives, responsibilities, and policies for the ITAM Program. ITAM establishes procedures to achieve optimum, sustainable use of training lands by implementing a uniform land management program that includes inventorying and monitoring land conditions, integrating training requirements with land carrying capacity, educating land users to minimize adverse impacts, and providing for training land rehabilitation and maintenance.

**AR 420-49**

This regulation rescinds AR 420-47. It specifies responsibilities, regulatory requirements, and procedures for HW and solid waste management. The current AR 200-1 incorporates most of these requirements. The solid waste management policy and responsibilities that still apply address solid waste collection procedures and operation of solid waste disposal facilities located on installations.

**AR 420-76**

This regulation provides policies, standards, and procedures for pest control activities on Army installations. It requires each installation's DPW to prepare and annually update an IPMP. The IPMP lists all program objectives in priority according to the potential or actual impact on health, morale, structures, or property.

Generally, installations limit pest control to the least destructive means by avoiding mass spraying, baiting, and poisoning where possible.

AR 420-76 will be replaced by AR 200-5, which is currently in draft format. AR 200-5 will also incorporate the DOD's 3 measures of merits (MOMs) for pest management, as articulated in Department of Defense Instruction (DODI) 4150.7.

### **DA PAM 200-1**

This pamphlet is a companion to AR 200-2, designed to assist Army users in the preparation and review of EAs and EISs that stem from NEPA.

### **DA PAM 200-4**

This pamphlet is a companion to AR 200-4. It provides guidance for implementing cultural resources management, and includes applicable statutory and regulatory requirements for cultural resource and Native American programs.

### **MCO P5090.2A**

This regulation (currently dated July 1998) provides guidance and instruction to Marine Corps forces to meet federal, state, and local environmental legislative and regulatory requirements. It is focused on environmental compliance and protection and identifies Marine Corps policy and responsibilities. MCO P5090.2A addresses the following major areas:

- Program management.
- Environmental compliance and protection requirements.
- Environmental media areas.
- Education and training.

The regulation provides guidance to Marine Corps forces operating ashore after disembarking. For guidance while afloat, see NWP 4-11 to incorporate environmental considerations into naval doctrine and reference specific Operational Naval Instruction (OPNAVINST) for guidance/regulations.

## **FEDERAL LAWS**

These laws provide states and federal agencies a legal framework within which to operate. These laws include acts and executive orders. For example, the Federal Facilities Compliance Act (FFCA) allows regulatory agencies to impose civil fines on other federal agencies, like the DA, for violations of the Resource Conservation and Recovery Act (RCRA).

### **ARCHAEOLOGICAL RESOURCES PROTECTION ACT (ARPA) OF 1979**

The ARPA stipulates that anyone excavating archaeological resources on federal lands must have a permit or be subject to civil or criminal penalties. Persons requesting an ARPA permit should be directed to the local US Army Corps of Engineers (USACE), district engineer. Installation law enforcement personnel should be aware of archaeological resources that need protection, and such sites should be monitored regularly.

Unit leader actions include:

- Avoiding digging or conducting operations in or near cultural sites or structures.
- Briefing soldiers/Marines on the importance of avoiding, protecting, and safeguarding archaeological sites, to include not collecting any of the artifacts.
- Reporting the discovery of any artifact and waiting for clearance to resume training.

**CLEAN AIR ACT (CAA) OF 1970**

The CAA, with amendments, requires the prevention, control, and abatement of air pollution from stationary sources (power plants) and mobile sources (vehicles). It controls the volatile organic compounds (VOCs) from fuel storage and dispensing, spray painting, and solvent use. Additional impacts include open burning, smoke obscurant generation, incineration of waste, and fugitive emissions.

The CAA implementing regulations concerning emission requirements do not apply to tactical vehicles. However, increasingly, stringent requirements for civilian vehicles do apply to other military vehicles. The CAA also controls open burning operations that result in nitrogen oxide (NOX). The inherent CAA requirement to control air pollutants and fugitive dust effects military activities. The CAA also regulates asbestos removal and disposal. Recent amendments include provisions for control of air toxins (hazardous air pollutants), acid rain, and ozone depleting compounds, such as CFC.

Unit leader actions include:

- Advising the chain of command of air pollution sources.
- Identifying and reducing sources of air pollution (dust control in training areas, excessive emissions from poorly maintained vehicles, parts washer emissions, and so forth).
- Using riot control and smoke agents only in approved training areas.

**CLEAN WATER ACT (CWA) OF 1972**

The CWA, amended in 1977, regulates point source discharges into US waters. This law applies most often to industrial facilities, sewage treatment facilities, and ships. Requirements for oil and HM spill reporting and waterways clean up affect military operations, including river crossings and amphibious actions. The CWA requires spill prevention plans for sites that store significant quantities of petroleum products.

The CWA also regulates storm water runoff from certain industrial sources and requires permits for activities that affect wetlands. There is also an inherent requirement to prevent soil erosion during construction and earth moving activities. Units must ensure that ground disturbed during tactical operations and training is preserved from future soil erosion.

Unit leader actions include:

- Knowing the locations of surface water and groundwater in the training areas or areas of operations.
- Planning and conducting training, operations, and logistics activities to avoid surface and groundwater areas where possible.
- Crossing streams and ditches only at designated vehicle crossing locations.
- Ensuring soldiers use designated vehicle wash areas and do not perform maintenance or refuel vehicles or equipment where a spill can easily contaminate surface water or groundwater.
- Ensuring released or spilled vehicle fluids do not contaminate surface water or groundwater. Taking immediate corrective action should oil or hazardous substance spills occur.
- Reporting all spills/releases as stated in the ISCP.
- Using proper preventive medicine and sanitation procedures to prevent surface water and groundwater contamination.
- Disposing of liquid waste from kitchens, showers, and baths properly.
- Avoiding entering terrain drainage areas with vehicles unless the area is dry and the ground will support such activities.
- Ensuring soldiers/Marines do not pour chemicals into sinks or storm drains.

For wetland and coastal water areas unit leader actions include:

- Requesting a map of designated wetlands and coastal water areas from the environmental office or range control.
- Ensuring soldiers/Marines are aware of wetland and coastal water areas and the restrictions for each area.
- Planning and conducting training, operations, and logistics activities without contaminating or causing unnecessary damage.
- Ensuring soldiers/Marines use designated vehicle wash areas and do not perform maintenance or refuel vehicles/equipment in these areas.
- Crossing streams and ditches only at designated vehicle crossings.
- Ensuring permits are obtained before any operations resulting in dredging or filling of wetlands.

For erosion control and its associated considerations, unit leader actions include:

- Verifying restrictions with range control.
- Briefing soldiers/Marines on environmental and safety considerations before field training.
- Planning missions to reduce the possibility of erosion. Prohibiting the use of live vegetation unless permitted; driving or parking vehicles close to trees; and cutting trees without permission from range control or the installation forester.
- Avoiding compaction of soil to the point that water can no longer percolate through it.
- Avoiding tactical maneuvers in erosion-susceptible areas, and refilling all fighting positions.
- Reducing maneuvers during periods of high rainfalls and saturated soil conditions.
- Making maximum use of existing roads and trails.

#### **COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) OF 1980**

The CERCLA, known as Superfund since its enactment in 1980, regulates past releases of HM into the environment. This act establishes personal liability of the individual responsible for the release. The Superfund Amendments and Reauthorization Act (SARA) amended the CERCLA in 1986. Together, these laws establish the "superfund" program to clean up HW sites. The corresponding DOD program is the IRP. The IRP helps identify, investigate, and clean up contamination on DOD property.

Unit leader actions include:

- Reporting any suspected contamination site to the chain of command.
- Ensuring soldiers/Marines understand the environmental ethic and apply it to avoid any future liabilities.
- Disposing properly of all HM/HW.

#### **EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT (EPCRA) OF 1986**

The EPCRA provides a mechanism for informing local populations about possible chemical hazards in the community. Also known as SARA Title III, the EPCRA originally applied only to industry. EO 12856 now extends the EPCRA to federal facilities, including DOD. EPCRA requires military installations to plan for effective emergency procedures in the event of a spill or other uncontrolled release of HMs.



The EPCRA also requires local governments to prepare for the emergency release of HM by appointing a local emergency planning committee (LEPC). Facilities with HM operations submit nonclassified inventories to the LEPC and immediately notify the LEPC when any release of HM occurs in quantities greater than permissible levels. Installations prepare annual reports of HM released through accident and normal operations.

Unit leader actions with regard to EPCRA include:

- Training soldiers/Marines on spill prevention planning, reporting, and cleanup IAW the ISCP.
- Maintaining a current HM inventory and an MSDS for every HM in the unit. Providing a copy of the HM inventory to the fire department or installation EMO.
- Complying with the ISCP.

#### **ENDANGERED SPECIES ACT (ESA) OF 1973**

This act, as amended, protects threatened or endangered plants and animals (to include fish, insects, and invertebrates). All federal agencies ensure their actions do not jeopardize threatened or endangered species or their habitats. The Secretary of the Interior publishes lists of endangered and threatened species in the Federal Register.

The ESA prohibits anyone from “taking”, harassing or harming, a listed fish and wildlife species unless permitted by the ESA. Additionally, the ESA makes it unlawful to remove or to maliciously damage or destroy listed plants in areas under federal jurisdiction.

The ESA prohibits the destruction, capture, trading, selling, or buying of listed species. The DOD consults with the National Marine Fisheries and the USFWS before taking any action that may effect, adversely or beneficially, a listed species or designated critical habitat.

Unit leader actions include:

- Enforcing range control and installation environmental regulations.
- Avoiding actions that could harm protected plants and animals and their habitats on the installation and any off-post training areas.
- Recognizing threatened and endangered species’ habitat and avoiding it during training, operations, and logistics activities.
- Marking environmentally sensitive areas as restricted movement areas during field training.
- Consulting the environmental office for other local requirements relating to wildlife and natural vegetation.

- Avoiding cutting brush and trees for camouflage.
- Coordinating with Preventive Medicine.
- Avoiding damage to marked wildlife food plots and watering areas.
- Complying with the installation endangered species management plan.

**FEDERAL FACILITIES COMPLIANCE ACT (FFCA) OF 1992**

The FFCA applies only to HW and solid waste requirements of the RCRA. This act represents, however, a growing consensus that federal facilities should comply with environmental laws in the same manner as private, nongovernmental civilian agencies.

Originally passed in 1992, the FFCA subjects DOD employees at all levels to personal criminal liability for environmental violations of any federal or state solid waste or HW law. Criminal sanctions under the federal HW law (RCRA) include a maximum fine of up to \$250,000, a jail sentence of up to 15 years, or both. The FFCA also allows regulatory agencies to issue NOVs, and impose civil fines and administrative action for solid waste and HW violations.

Unit leader actions include:

- Cooperating with environmental inspectors.
- Performing assessments of the work areas of soldiers/Marines to ensure compliance with environmental guidelines.
- Informing the chain of command when environmental problems are discovered.

**FEDERAL INSECTICIDE FUNGICIDE, AND RODENTICIDE ACT (FIFRA) OF 1972**

The FIFRA requires licensing or registering pesticide products by the US EPA. It also requires proper management of pesticide use, storage, and disposal. Only certified personnel, or someone under the direct supervision of a certified person, may use restricted use pesticides. IPM is the Army's comprehensive approach to the prevention, elimination, and control of pests. The IPM concept addresses pest problems in various ways and considers all options for pest removal/control.

Unit leader actions include:

- Ensuring field sanitation teams are properly trained in the use of HM in the field sanitation kit (i.e., pesticides, rodenticides, insecticides [insect repellent], and fungicides [foot powder]).
- Employing procedures IAW FM 21-10 and FM 21-10-1.

- Notifying the installation DPW or G4 (Marines) concerning pest control in unit billets and dining facilities.

#### **FEDERAL HAZARDOUS MATERIALS TRANSPORTATION LAW (FEDERAL HAZMAT LAW) OF 1988**

Formerly known as the Hazardous Materials Transportation Act (HMTA), this law authorizes the US DOT to issue interstate and intrastate regulations related to transportation of HM. DOT oversight applies to; packing and repacking; handling; labeling, marking, and placarding; routing.

In addition, the HMTA establishes record keeping requirements and a registration program for shippers, carriers, and container manufacturers. Units most commonly haul HM in the form of POL products and ordnance. Units comply with these requirements during operations and deployments that require vehicle movement or convoys on federal and state highways.

Unit leader actions include:

- Training soldiers/Marines on proper transportation procedures to include vehicle placarding, material packaging, vehicle loading, operator requirements, safety precautions, and spill procedures.
- Ensuring accountability for all HM.
- Applying the risk management process to each unit movement requirement.

#### **MARINE MAMMAL PROTECTION ACT (MMPA) OF 1972**

The MMPA provides protection for marine mammals. The MMPA also prohibits hunting or harvesting these animals except by permit. As defined by the MMPA, marine mammals include the following:

- Whales.
- Dolphins (porpoises).
- Sea otters.
- Polar bears.
- Any mammal morphologically adapted to the marine environment.

Unit leader actions include:

- Ensuring soldiers/Marines understand they are not to harass, capture, or injure marine mammals.
- Planning operations to avoid sensitive marine mammal habitats.
- Reporting suspected violations through the chain of command.

**MILITARY MUNITIONS RULE OF 1997**

This rule amends RCRA and identifies when conventional and chemical munitions become HW under the RCRA. It is a minimum federal standard for management of waste military munitions and provides new procedures for the storage, transport, and disposal of such waste. The DOD, other federal agencies, and government contractors who produce or use military munitions for the DOD are affected by this rule. States may adopt military munitions requirements more stringent than the federal rules.

Unused munitions become waste when abandoned (i.e., buried, landfill, dumped at sea, etc.); detonated (except as a consequence of intended use); burned, incinerated, or treated before disposal; removed from storage for treatment/disposal; deteriorated or damaged beyond repair; recycled, or reused; or declared a waste by an authorized military official.

Military munitions are not waste when used for their intended purpose, such as for training or part of research, development, testing, and evaluation activities, or during range clearance activities on active and inactive ranges. This rule excludes unused munitions that are repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subject to materials recovery activities. Assignment of a particular condition code or placement in one of DOD's demilitarization accounts is not dispositive of whether an item is a waste because many of these materials are subjected to recovery, reuse, and recycling activities. (See the actions associated with the Federal Hazardous Materials Transportation Law of 1998.)

Unit leader actions include:

- Training soldiers/Marines on proper procedures for the transportation, storage, handling, and turn-in of military munitions.
- Ensuring accountability for all munitions.
- Reporting all problems with damaged or malfunctioning munitions through the chain of command and the issuing/turn-in facility.

**NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) OF 1969**

The NEPA affects virtually every proposed action on military installations. Installations pay particular attention to actions that may present a danger to the health, safety, or welfare of civilian and military personnel, or may cause irreparable harm to animal or plant life. The NEPA requires federal agencies to consider the environmental impacts of their actions during planning and decision making.

Installations document these considerations, while ensuring public involvement in the planning process. Only those actions categorically excluded from NEPA documentation requirements are exempt. (See Chapter 4 and AR 200-2 for a list of categorical exclusions.) EO 12114 extends the application of the NEPA philosophy to major federal actions in foreign nations.

Unit leader actions include:

- Identifying areas of environmental concern.
- Identifying mission-related environmental risks.
- Identifying potential effects of environmental factors on missions and operations.
- Discussing environmental risk in training meetings and briefings.
- Identifying alternative training scenarios and techniques.
- Consulting installation environmental office personnel regarding requirements for NEPA documentation.

#### **NATIONAL HISTORIC PRESERVATION ACT (NHPA) OF 1966**

The NHPA requires federal agencies to consider the effects of their actions, such as construction, leasing, land transactions, and base realignment and closure (BRAC), on cultural and historic resources. The act seeks to safeguard against the loss of irreplaceable historic properties, especially those located on federal land. Many Army and Marine Corps facilities are located on historic and archaeological sites, to include prehistoric settlements and 19th century cantonments.

Unit leader actions include:

- Identifying and recognizing possible archaeological and historical artifacts, sites, and structures.
- Planning and conducting training, operations, and logistics activities to avoid damage to archaeological or historic artifacts, sites, or structures.
- Instructing soldiers/Marines to leave historic artifacts in place and report newly discovered items to the chain-of-command.
- Reporting vandalism, theft, or damage to historic, cultural, or archaeological sites.

#### **NATIVE AMERICAN GRAVES REPARATION ACT (NAGPRA) OF 1990**

The intent of this act is to ensure the protection and rightful disposition of Native American cultural items, including human remains, from federal lands. It establishes a consultation process for the intentional excavation or inadvertent discovery of NAGPRA cultural items. Soldiers and Marines must immediately report the discovery of Native American remains and artifacts.

Unit leader actions include:

- Identifying and recognizing possible Native American historic artifacts, sites, and remains.
- Planning and conducting training, operations, and logistics activities to avoid damage to Native American historic artifacts, sites, or remains.
- Instructing soldiers/Marines to leave Native American historic artifacts, sites, or remains in place and report newly discovered items to the chain-of-command.
- Reporting vandalism, theft, or damage to Native American artifacts, sites, or remains.

#### **NOISE CONTROL ACT (NCA) OF 1972**

The NCA establishes a national policy to promote an environment free from noise that jeopardizes the public's health and welfare. It also regulates noise emissions from commercial equipment, such as transportation and construction equipment. The NCA exempts noise from military weapons or combat equipment. However, the goal of the Army's environmental noise abatement program is to achieve compliance with applicable noise regulations in a manner consistent with mission accomplishment.

Unit leader actions include:

- Complying with local and installation noise restrictions.
- Maintaining equipment to perform to maintenance specifications.
- Checking with range control to confirm installation compatible use zone (ICUZ) program requirements.

#### **OIL POLLUTION ACT (OPA) OF 1990**

The OPA is far more comprehensive and stringent than any previous US or international oil pollution liability and prevention law. It is divided into nine titles focused on oil spills by vessels and facilities. It is principally a response to events like the grounding of the *Exxon Valdez* and several subsequent accidents in 1989/1990. It establishes a standard for measuring natural resource damage applicable to all actions for such damage.

Additionally, it emphasizes federal direction of public and private efforts both of the response to avert the threat of an oil spill and of removal of oil that has been spilled. The act specifies federal preeminence in undertaking and directing response actions but preserves state authority over significant aspects of removal activities.

Unit leader actions include:

- Training unit spill prevention/response teams.
- Reporting all known or suspected spills through the chain of command and IAW your unit SOP.
- Complying with the ISCP.
- Applying the risk management process to each operation to reduce the probability and severity of potential spills.

#### **QUIET COMMUNITIES ACT OF (QCA) 1978**

The QCA amended the NCA to allow local communities to develop ordinances controlling unnecessarily loud noises. To minimize contention between installations and surrounding communities, the DOD established the installation compatible use zone (ICUZ) program. Following are the program's objectives:

- Assessing environmental impacts of the noise produced by proposed actions and both on-post and off-post noise sources.
- Complying with federal regulations.
- Ensuring installation mission compatibility with local land use.
- Minimizing environmental noise impact through engineering, operational controls, siting, and architecture.
- Protecting the health and welfare of all individuals adjacent to installations.

Unit leader actions include:

- Complying with local and installation noise restrictions.
- Maintaining equipment to perform to maintenance specifications.
- Confirming installation compatible use zone (ICUZ) program requirements with range control.

#### **RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OF 1976**

The RCRA (originally the Solid Waste Disposal Act), with amendments, establishes guidelines and standards for HW generation, transportation, treatment, storage, and disposal. All states require RCRA operating permits for HW treatment, storage, and disposal facilities (TSDF). The RCRA also covers the laws surrounding the disposal of solid waste to include solid waste management, landfill regulation, recycling, and affirmative procurement.

RCRA regulations require training for soldiers and Marines handling or managing HM. It also requires management of underground storage tanks (USTs) and clean up of hydrocarbon contamination.

Unit leader actions include:

- Complying with the installation HW management plan.
- Supporting the installation recycling program (ensuring soldiers/Marines understand its importance).
- Removing expended brass, communications wire, concertina, and trip wires from waste (see the Military Munitions Rule).
- Conducting police calls to collect and dispose of solid waste (trash).
- Disposing of kitchen waste only as authorized; prohibiting garbage burning/burying.
- Ensuring the unit SOP covers HW and HM, including spill contingencies.
- Collecting and turn-in HW/HM according to local and installation procedures, both in garrison and in the field.
- Properly cleaning up, reporting, and documenting any hazardous spills.
- Transporting HW according to local and installation procedures.
- Conducting maintenance, and allowing the use of HM only after soldiers/Marines have been properly trained.
- Ensuring the unit ECO is properly trained and that the training is documented.
- Maintaining a current HM inventory and an MSDS for every HM in the unit. Providing a copy of the HM inventory to the fire department or installation EMO.

#### **SAFE DRINKING WATER ACT (SDWA) OF 1974**

The SDWA regulates drinking water quality. It bases assessments of water quality on levels of pollutants present in the water. Water supply facility managers analyze treated water regularly. If the water quality is below standards, water supply providers notify their customers. The Army's program objectives are to conserve water resources by implementing conservation plans and to provide drinking water that meets regulatory standards.



Unit leader actions include:

- Enforcing the installation water conservation plan.
- Briefing soldiers/Marines on the impact of polluting water sources.
- Employing pollution prevention practices.
- Reporting all concerns about water quality through the chain of command.

#### **SIKES ACT (SA) OF 1985**

The SA, as amended in November 1989, allows each military department to provide services for fish and wildlife management. The military also prioritizes work with federal and state fish and wildlife conservation agencies. An installation's fish and wildlife management program operates under a cooperative plan mutually agreed to by the installation commander, the regional office of the USFWS, and the state agency designated by the host state.

Unit leader actions include:

- Enforcing range control and installation environmental regulations.
- Avoiding actions that could harm protected animals and their habitat on the installation and any off-post training areas.
- Recognizing threatened and endangered species' habitat and avoiding it during training, operations, and logistics activities.
- Marking environmentally sensitive areas as restricted movement areas during field training.
- Consulting with the environmental office for other local requirements relating to fish and wildlife.
- Avoiding damage to marked wildlife food plots and watering areas.
- Complying with the installation endangered species management plan.

#### **TOXIC SUBSTANCES CONTROL ACT (TSCA) OF 1976**

The TSCA places restrictions on certain chemical substances. These restrictions seek to limit human and environmental exposure to highly toxic substances, including CFCs, polychlorinated biphenyls (PCBs), and asbestos. TSCA requires chemical testing of substances entering the environment. It also regulates the release of these chemicals.

Unit leader actions include:

- Reporting any suspected asbestos containing material or PCBs to the installation EMO.
- Training all soldiers/Marines (mechanics) that perform maintenance on any air conditioning system on proper procedures for the use, recovery, recycling, or disposal of refrigerants.

## **EXECUTIVE ORDERS**

### **EO 11987**

Dated 24 May 1977, this order directs all federal agencies to prevent the introduction of exotic species (all plants and animals not occurring, either presently or historically, in any ecosystem of the US) into the natural ecosystems of the US. ("US" means all of the fifty states, the District of Columbia, the Commonwealth of Puerto Rico, American Samoa, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands.) This order is of special importance when addressing redeployments to the US from areas outside the US.

### **EO 11988**

Dated 24 May 1977, this order (Floodplain Management) addresses the actions federal agencies must take to identify and protect floodplains. Additionally, it directs agencies to take into consideration the effects of actions in a floodplain. The intent is to seek to preserve and enhance the natural value of floodplains. This intent includes minimizing the risk of losses from flooding.

### **EO 11990**

Dated 24 May 1977, this order (Protection of Wetlands) addresses the actions federal agencies must take to identify and protect wetlands. Additionally, it directs agencies to take into consideration the effects of actions in wetlands. The intent is to preserve and enhance the natural values of wetlands and to minimize the risk of wetland destruction.

### **EO 12088**

Dated 13 October 1978, this order (Federal Compliance with Pollution Control Standards) links federal environmental regulations and federal facilities. It directs all federal facilities to control and monitor environmental pollution in compliance with federal environmental regulations.

This order also established the A-106 (1383) reporting process, now referred to as environmental program requirements. In November 1988, the EPA issued the Federal Facilities Compliance Strategy, also known as the EPA Yellow Book, which establishes a comprehensive and proactive approach by which federal facilities may comply with federal regulations.

**EO 12114**

Dated 4 January 1979, this order (Environmental Effects Abroad of Major Federal Actions) addresses environmental effects of major federal actions abroad. It establishes procedures for federal agencies in foreign countries and global communities to consider the effects of their actions on the environment. The Department of State supervises and coordinates these efforts overseas. The objective of this program is to provide information to decision-makers, increase awareness and interest in environmental concerns, and encourage environmental cooperation with foreign nations.

**EO 12580**

Signed on 23 January 1987, this order (Superfund Implementation) amended EO 12088, which delegates CERCLA duties and powers (as amended by the SARA). It provides for a National Contingency Plan (NCP) to provide national and regional response teams to plan and coordinate HM/HW preparedness and response actions. The response teams may include representatives from state and local governments.

**EO 12856**

Dated 6 August 1993, this order (Federal Compliance With Right-To-Know Laws and Pollution Prevention Requirements) challenges the federal government to publicly lead by example by applying source reduction in the management of its facilities and in its acquisition practices. It commits federal agencies to publicly report toxic wastes and emissions and to reduce toxic releases by at least fifty percent by 1999. By preventing pollution, the federal government not only protects the environment, but it also saves the taxpayers money by reducing waste management costs and long-term liability for expensive clean up. This order requires that all federal facilities comply with the provisions of the EPCRA, which previously applied only to industry.

**EO 12898**

Dated 11 February 1994, this order (Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations) directs each federal agency to conduct its programs, policies, and activities that substantially effect human health or environment in an appropriate manner. This manner ensures that such programs, policies, and activities do not exclude persons (including populations) from participating, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities because of their race, color, or national origin.

**EO 13007**

Dated 24 May 1996, this order (Indian Sacred Sites), provides direction to federal agencies on managing Native American sacred sites. It requires that federal agencies allow Native Americans reasonable access to lands that contain sacred sites. Further, federal agencies must avoid adversely effecting

the “physical integrity” of sacred sites and ensure reasonable notice is provided to Indian tribes when land management policies may restrict future access or adversely effect sacred sites.

**EO 13101**

Dated 14 September 1998, this order (Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition) replaces EO 12995 and EO 12873. It requires federal agencies to incorporate waste prevention and recycling into their daily operations and implement cost effective procurement preference programs for recycled and environmentally preferable products and services. It is the national policy to prefer pollution prevention, whenever feasible. Pollution that cannot be prevented should be recycled; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner. Disposal should be employed only as a last resort. Federal agencies shall comply with executive branch policies for the acquisition and use of environmentally preferable products and services and implement cost-effective procurement preference programs favoring the purchase of these products and services.

**OTHER EO INFORMATION**

For information on other environmentally related EOs, or the exact text of a particular EO, you may want to refer to the web site address at <http://www.denix.osd.mil/denix/Public/Legislation/EO/toc.html> or the web site at <http://128.174.5.51/>.

**STATE LAWS**

Each state has its own regulatory organization charged with developing and implementing environmental regulations. Many of the state regulations parallel federal environmental regulations and are often more stringent.

**LOCAL LAWS**

Local laws and ordinances address the concerns of the local communities. Generally, they are based on federal and state laws. However, each municipality or community may place more stringent restrictions on certain activities (noise restrictions during certain hours of the day).

**HOST NATION LAW/FINAL GOVERNING STANDARDS**

The Army and Marine Corps are committed to actively addressing environmental quality issues in relations with neighboring communities and assuring that consideration of the environment is an integral part of all decisions. Installations and units OCONUS that are not subject to federal environmental regulations promulgated by EPA will, in areas where a HN has minimal or no environmental laws and regulations, comply with AR 200-1 and 200-2. In countries where there are HN laws, the FGS will be used according to the executive agent of that country.

## INTERNATIONAL LAWS AND TREATIES

- Biological Diversity Convention.
- International Tropical Timber Agreement.
- International Convention for the Prevention of Pollution from Ships.
- Convention on International Trade in Endangered Species.
- Basel Convention (HW).
- NOX Protocol (air pollution).
- London Dumping Convention (marine pollution from ships dumping wastes generated on land).
- Montreal Protocol (ozone depleting substances).
- Kyoto Accord (greenhouse gases).

US armed forces are obligated to abide by the provisions of treaties and conventions to which the US is bound. These treaties can impact military operations in several ways. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, for example, could limit HW disposal options available to a deployed force. While this treaty has not been ratified by the Senate at this time, the US is still a signatory to it. Whether bound by a treaty or not, its mere existence may affect operations. Recent examples from Bosnia-Herzegovina have confirmed this situation. See CALL Newsletter 99-9 for more information on this recent example.

Another body of laws that effect US military forces are international treaties that govern armed conflict, known collectively as Environmental Laws of War (ELOW). One such treaty is the Convention on the Prohibition of Military or any Other Hostile Use of ENMOD. This treaty prohibits any military use of ENMOD, any technique for changing, through the deliberate manipulation of natural processes, the dynamics, composition, or structure of the environment. The terms in the ENMOD Convention are broadly defined and subject to interpretation by each nation.

The 1977 Protocol I addition to the 1949 Geneva Convention also places restrictions on environmental warfare—using terms similar to those in the ENMOD Convention. This convention requires combatants to “...protect the natural environment against widespread, long-term, and severe damage” during war. This protection includes a prohibition of the use of methods or means of warfare that could cause extensive damage to the natural environment and endanger the health or survival of the population. This convention also prohibits attacks against the natural environment as a means of reprisal. Although the United States has not ratified all of the provisions of Protocol I, the provisions, as applied by other nations, may still affect

operations. Commanders must consult the SJA for specific advice on international laws or conventions.

## **ENVIRONMENTAL COMPLIANCE ENFORCEMENT**

Under the FFCA, federal and state environmental regulatory agencies can impose civil fines on federal agencies, including the Army and Marine Corps, for RCRA violations. For the Army and Marine Corps, penalties can be fines, damage awards, and intervention from the EPA and other federal, state, and regional agencies. An additional consequence is an increase in monitoring by these agencies.

Unit leaders and their subordinates are required to comply with all federal, state, and local laws designed to protect the environment. Violators can be held personally liable for clean up costs and civil or criminal penalties. Violators include the actual person who causes contamination and the commanders, supervisors, and leaders who allowed the contamination to occur and did not take immediate action to prevent or correct the occurrence. The penalty can be up to \$50,000 for each day of violation and/or up to two years in jail.